

flower beetle, *Euphoria basalis* G. & P., stating that he found the species on cotton blooms at Gomez Palacio, in the Laguna district of Northern Mexico, and at Cuernavaca. The beetle was very common at both places and to a certain extent injurious. He frequently found two beetles in a single cotton bloom, and in one case four. Published records show the occurrence of this beetle only in Mexico and there only in the plateau region—not in tropical portions, apparently. Dr. Morrill, however, called attention to the fact that Gomez Palacio has an elevation of only 2,700 feet, while Cuernavaca, seven degrees of latitude further south, is about 5,000 feet above sea level, thus showing that the species really has quite a geographical as well as vertical range. The specimen shown from Gomez Palacio is large, with dull yellow markings, and the hundreds of specimens observed at that place were of about the same size and color. The specimen from Cuernavaca, on the other hand, is smaller, with markings of a more intense yellow, and is typical of the many observed there. Dr. Morrill stated that there were fourteen specimens of this species in the National Museum collection all labelled "Mexico," without other information concerning locality. No two of these specimens are alike and they present gradations in color and size between the specimen from Gomez Palacio and the one from Cuernavaca.

—Mr. Fiske presented the following paper:

CATOGENUS RUFUS,

A Coleopterous Parasite.

BY W. F. FISKE.

During the summer of 1903, a single specimen of this beetle was bred from the cocoon of a Hymenopterous (Braconid) parasite of the Elm Borer (*Saperda tridentata*), but subsequent examination of the cocoon failed to determine definitely whether the beetle had developed on the parasite itself or whether it had entered the empty cocoon and there pupated. The former theory was believed to be the true one, but could not be proven. During 1904 three specimens were bred under circumstances which cannot be construed otherwise than to amply confirm it.

April 13, 1904, a Cerambycid pupa of an unknown species (allied to *Goes*, and possibly *Goes oculata*) was found in a small chestnut which had died the previous summer.

On April 16 this was carefully examined and described, and on the following day, another careful examination discovered a very minute larva attached to the ventral surface of the abdomen, which was at first supposed to be that of a Hymenopterous parasite, but subsequently found to be Coleopterous. This larva, which was extremely minute and hardly visible without the aid of a lens, was believed to have hatched during the day intervening between the two examinations. It was attached by its head only (a faint dark colored spot soon appearing upon the body of the host at that point), and its body projected at an angle from that of its host.

For several days it remained in this position, increasing slowly in size, until the 19th, when it was found to have relaxed its hold, and was removed to a freshly pupated *Callidium aereum*, in the hope that the wound already inflicted on its host might not necessarily be fatal. Careful examination showed that this pupa was slightly wounded on one of its tarsi shortly after the introduction of the parasite, but the latter could not be observed to feed until May 8, when it was found to have moulted. The new host at this date was still alive, as was also the pupa upon which the parasite was originally found.

May 10 it was feeding freely and growing rapidly, and the new host appeared to be dead.

May 20 it had completely destroyed its host, and no trace of cast skin to indicate that it had moulted again could be found. It was then resting quiescent, and remained so until June 3, when it pupated. The pupa was entirely unchanged June 16, but July 3 was found to have produced a perfect *Catogenus rufus*.

On April 13, and on the same tree as that from which the above mentioned specimen was taken, a cocoon of one of the well-known parasites of the Cerambycidae, *Bracon dorsatus*, Say, was collected and placed under observation. July 5, on examination, a second specimen of *Catogenus rufus* was discovered, plainly visible through the parchment-like walls, and careful examination failed to discover any visible aperture by which any larva might have entered. This specimen was considerably below average size, while that bred from the Cerambycid pupa was, though much smaller than some specimens, about an average between the largest and the smallest.

A third specimen was afterward reared under still more interesting circumstances, and serves to confirm its life-history as above set forth.

April 26, 1904, a cocoon containing a larva of the same species of Hymenopterous parasite above mentioned was taken in the same tree from which the earlier collections were made, and placed in a breeding vial. June 3 the parasite was noted as having pupated, and very nearly reached maturity, but beside it, plainly visible through the transparent walls of the cocoon, was noticed a small white larva, supposed at that time to be that of a hyperparasite. This pupated soon after, and on July 9 was found to have just emerged; a very small specimen of *Catogenus rufus*.

The larva of the beetle appears, therefore, to be a true external parasite, its habits differing in no essential feature from those of many species of external Hymenopterous parasites.

The adult is fairly common throughout the South, and is found beneath the loose bark of recently dead and dying trees, both coniferous and deciduous. It occurs at nearly all seasons of the year, but is especially common during the late fall and early spring, and is found hibernating in situations similar to the above mentioned.

—Dr. Dyar then presented the following paper:

A FEW NOTES ON THE STRECKER COLLECTION.

BY HARRISON G. DYAR.

The Strecker collection is well preserved at Reading, Pa., just as Dr. Strecker left it. All the types are clearly marked and are without any admixture of foreign species. Dr. Strecker had an excellent eye for species and hardly ever redescribed anything that he had in his collection. The ascertainable synonyms, therefore, are not very many; I put a few on record here.

Family NOCTUIDÆ.

I could not form any judgment on most of the Noctuid types without being able to take them away for comparison with other collections. The species described under *Schinia* fall both into *Schinia* and *Lygranthæcia* on the character of the inner claws on the fore tibiæ as follows—*Lygranthæcia*: *imperspicua*, *dolosa*, *hanga*, *ultima*, *inclara*, *fastidiosa*, *nubila*, *siren*, and *lora*. *Schinia*: *lanul*, *obscurata*, *tanena*, *ar*, *labe*, *rubiginosa*, *approximata*, and *neglecta*.

Schinia ochreifascia Smith is not a synonym of *lanul*, but an entirely distinct species; *velaris* Grote has also been referred to the synonymy, but I do not know about it.